

IN THE SPECIFICATION

Please replace the title of the invention with the following:

APPARATUS AND METHOD FOR RENDERING AN ANTIALIASED IMAGE

Please replace paragraph [0048] with the following rewritten paragraph:

a1 [0048] The GPU 8 functions as a rendering processor. That is, the GPU 8 calculates pixel data representing pixels of the polygons according to the color data of the vertices ~~apexes~~ of the polygons and the Z-values representing the depth thereof from a viewpoint. Thereafter, the GPU 8 writes (or renders) the calculated pixel data to the graphic memory 19. Thus, an image rendering operation is performed. Moreover, the GPU 8 reads pixel data rendered onto the graphic memory 19 and outputs the pixel data in the form of a video signal.

Please replace paragraph [0075] with the following rewritten paragraph:

a2 [0075] When supplied with the polygon data of 1 frame from the main CPU 4, the GPU 8 divides each of the pixels located at the coordinates of each of the vertices ~~apexes (or vertexes)~~ of the polygons into 16 sub-pixels (that is, one pixel is divided into a 4x4 matrix of sub-pixels). Then, the GPU 8 obtains RGB values of the sub-pixels of the sides and inner portions of the polygons by performing a DDA (Digital Differential Analyzer) operation with sub-pixel accuracy.

Please replace paragraphs [0077], [0078] with the following rewritten paragraphs:

a3 [0077] Consider the following example for providing values to sub-pixels p1, p2, and p3 of the three vertices ~~apexes~~ of a triangular ~~triangle~~ polygon. First, such a DDA operation is performed on each of a set of the sub-pixels p1 and p2, and a set of the sub-pixels p2 and p3 and a set of the sub-pixels p1 and p3 with sub-pixel accuracy. Thus, the polygon data Z, R, G,

B, S, T, and Q corresponding to the sub-pixels located on the three sides of this polygon, and the polygon data Z, R, G, B, S, T, and Q corresponding to the sub-pixels located in this polygon are obtained, by using X-coordinates and Y-coordinates thereof as variables.

AB [0078] The polygon data X, Y, and Z represent sets of X-coordinates, Y-coordinates and Z-coordinates of three vertices apexes—of the triangular triangle—polygon, respectively. Further, the polygon data R, G, and B represent the luminance values of red, green and blue colors at the three vertices apexes—of the polygon, respectively. Furthermore, the polygon data S, T, and Q represent texture coordinates (that is, homogeneous coordinates corresponding to the textures) at the three vertices apexes—of the triangular triangle—polygon.
